

303 3/8"

Work Order ID 151527

151527

Page 1

Tuesday, September 27, 2016 2:27:55 PM

Item ID: D4428-1

Accept

N900040100

Setup Start *NS1*

Revision ID:

Stop *NS2*

Item Name: Bushing

Start Date: 9/23/2016

Start Qty: 10.00

10

Cust Item ID:

Required Date: 9/27/2016

Req'd Qty: 10.00

10

Customer:

Reference:

DAS

Approvals:

Process Plan:

21
9-89

Date: SEP 28 2016

Tooling:

Date:

Run Start *NR1*

QC:

Date:

SPC (Y/N):

Date:

Stop *NR2*

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

Draw Nbr

Revision Nbr

D4428

A

100

0.00

100

Hardinge

Hardinge CNC LATHE SMALL

Hardinge CNC Lathe Small

Memo

0.00

Machine as per folio FB063 AND DWG

DWG REV: A

FOLIO REV: B7

DEBURR

110

0.00

110

QC

QC2- Inspect parts off machine FAI/FAIB

Memo

0.00

Quality Control

DAS

45

9-89

17-1-17

DAS

45

9-89

17-1-17

QA Closed: _____ Date: _____

Work Order update only

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS							
Part No. _____			Rework	☐	Skid-tube	☐	Cross tube	☐	Water Jet	☐	Engineering	☐	
			Scrap	☐	Machining	☐	Small Fab	☐	Prod. Eng. Coord.	☐	Quality	☐	
NCR No. _____			Use-as-is	☐	Thermoforming	☐	Finishing	☐	Rec/Store/Packaging	☐	Other	☐	
			Suspected Unapproved	☐	Large Fab	☐	Composite	☐	Supplier	☐		☐	
Date :			Step #:			QTY Effective :				MRB (QSI042) Approval			
Description Work Order Deviation						Disposition							
													Completed By
													Lead hand / Supervisor Approval Verification
													QC / QA Coordinator Approval
Root Cause			FAULT CATEGORY										
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐		
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐		
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐		
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐		
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐		
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐		
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐		
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐		
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐		
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐		
Past Expiry Date	☐	Manufacturing Process	☐										
Misidentified	☐	Past Due	☐	OTHER :									

Work Order ID 151527

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151527

Page 2

Item ID: D4428-1 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Bushing
Start Date: 9/23/2016 Start Qty: 10.00 ***10*** Cust Item ID:
Required Date: 9/27/2016 Req'd Qty: 10.00 ***10*** Customer:
Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* QC Quality Control	QC8- Inspect parts - second check Memo	0.00 0.00				20	10		DAS 14 9-89 17/01/18
130 *130* Packaging Packaging	Identify as per dwg & Stock Location: <u>85098</u> Memo	0.00 0.00				20x		JAN 19 2017	DAS 26 9-89
140 *140* QC Quality Control	QC21- Final Inspection - Work Order Release Memo	0.00 0.00						17/01/23	DAS 21 9-89 JAN 20 2017

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval		
Description Work Order Deviation				Disposition					
RAC 31 30-9									
RAC 32									
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Mislabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐							
OTHER : ☐									

Picklist Print

Tuesday, September 27, 2016 2:28:00 PM

Page 1

Work Order ID: 151527

151527

Parent Item: D4428-1

D4428-1

Parent Item Name: Bushing

Start Date: 9/23/2016

Required Date: 9/27/2016

Start Qty: 10.00

Required Qty: 10.00

Comments: IPP REV:A NEW ISSUE 11-07-29 JLM VERIFIED BY:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.375		Purchased	No			100	f	26.5070	0.09	0.947368			

M303R0 375

303 Round Bar 0.375"

Location

Loc Qty

Loc Code

MAT028

26.507

m127647

2.42

m133699

0.087

m134776

24

2.0 ^{PA} DAS
45 17-1-17
9-8

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

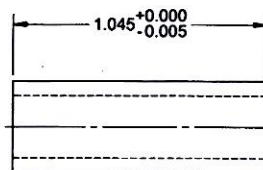
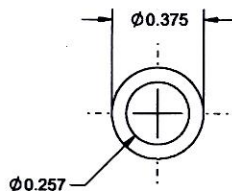


QA Closed: _____ Date: _____

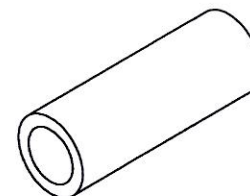
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :			MRB (QSI042) Approval 		
Description Work Order Deviation				Disposition					
							Completed By		
							Lead hand / Supervisor Approval Verification		
							QC / QA Coordinator Approval		

Root Cause				FAULT CATEGORY			
Environment ☐		No Re-verification ☐		Pressure/Forced ☐		Temperature/Cure ☐	
Design ☐		Operator ☐		Bending ☐		Set-up ☐	
Doc/Data ☐		Offset/Setup ☐		Centre Not Concentric ☐		BOM/Route ☐	
Equip/Tooling ☐		Supplier ☐		Cracks ☐		Broken/Damage/Defect ☐	
Handling/Pre ☐		Training ☐		Crimp/Kink/Ripple/Wave ☐		Inspection Incomplete/Unqualified ☐	
Material ☐		Use for Testing ☐		Cuffs ☐		Contamination ☐	
Internal Transport ☐		Poor Information ☐		Crushing ☐		Countersink ☐	
Tribal Knowledge ☐		Rushing ☐		Heat Treat ☐		Cut Too Short ☐	
LOA ☐		Product Improvement ☐		Wave/Twist in Tube ☐		Instructions Incomplete/Unclear ☐	
Substation ☐		Process Improvement ☐		Marks/Chatter ☐		Drill Holes ☐	
Past Expiry Date ☐		Manufacturing Process ☐		OTHER : _____			
Misidentified ☐		Past Due ☐					



D4428-1 BUSHING



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 151527 *MW*
16-09-28

RELEASED
2011-08-02 *MW*

NOTES:

- 1) MATERIAL: AISI 303 STAINLESS STEEL ROUND BAR PER ASTM A582
REF. DART SPEC M303R
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: NONE
- 7) WEIGHT: 0.02 lbs

A NEW ISSUE		AJS	11.07.28
REV.	DESCRIPTION		BY DATE
DESIGN	AJS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	AJS		
CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. A
MFG. APPR.	<i>[Signature]</i>	D4428	SHEET 1 OF 1
APPROVED	<i>[Signature]</i>	TITLE	SCALE
DE APPR.	<i>[Signature]</i>	BUSHING	NTS
DATE	11.07.28	COPYRIGHT © 2011 BY DART AEROSPACE LTD THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.	